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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,807	02/13/2002	Yoshimitsu Takayama	SUSU118702	6219

26389 7590 10/12/2005

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EXAMINER

MARIAM, DANIEL G

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/049,807

Applicant(s)

TAKAYAMA, YOSHIMITSU

Examiner

DANIEL G. MARIAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 and 21-27 is/are allowed.
- 6) ☒ Claim(s) 28-31, 33 and 34 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. In response to the Office Action mailed on June 1, 2005 applicant has submitted an amendment filed on September 22, 2005 amending claims 1-8, canceling claims 9-20, and adding new claims 21-34.

***Response to Arguments***

2. Applicant's arguments (in light of the amendment) see pages 8-9, filed September 22, 2005, with respect to claims 1-5 and 7-8 have been fully considered and are persuasive. The 35 USC 102 rejection of claims 1-5 and 7-8 has been withdrawn.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denenberg, et al. (5,673,338) in view of Barry, et al. (5,309,246).

With regard to claim 28, Denenberg, et al. (hereinafter "Denenberg") discloses a work,  
i.e.,

art object or artwork or item, storage, i.e., central computer, configured to store digital data representing a color of an only one work i.e., artwork or art object (See item 100 and 54 in Fig. 3; and Figs. 5 and 6); a collation, i.e., comparing, section configured to calculate a degree of deviation, i.e., anomalies or irregularities or divergence, between digital data representing a color of a target work, i.e., artwork or item to be verified, to be identified and the digital data stored in

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the work storage (col. 11, line 56 through col. 12, line 7; col. 12, line 64 – col. 13, line 19); and a test section, i.e., auto correlation, i.e., configured to perform a test of hypothesis based on a predetermined hypothesis using the degree of deviation (At col. 13, lines 58-65, Denenberg states: “Once the final level of magnification has been achieved and successful visual correlation between objects and reference data exists, a machine correlation (sometimes referred to as autocorrelation) may be performed to quantify the degree of match between the object and the high-magnification reference image. A pixel-by-pixel correlation, performed by the host (central) computer, yields a numerical percentage correlation factor as represented in FIG. 7 . . . and at col. 14, lines 29-39, Denenberg further states: For qualitative results, the system of the invention achieves autocorrelation preferably by taking the reference image and producing a reverse (negative) of the reference image, then superimposing that reverse image with the image being investigated. The superimposed images are reviewed pixel by pixel. **If** (emphasis added by the Examiner) autocorrelation is found, the positive and negative images will produce a nearly perfect neutral grey, with all overlying values averaging to the grey. **If** (emphasis added by the Examiner) the images are slightly offset or even rotated, certain recognizable patterns will emerge, leading the operator to take obvious corrective positioning steps.”

Although Denenberg does not elaborate the data being a representative of a color component, at col. 7, lines 36-43, Denenberg states: “the invention as discussed above is particularly applicable to works of graphic art, it is also applicable to other objects which are subject to counterfeiting and copying. Such other objects can include valuable items such as rare coins, stamps, gems and jewelry as well as other art objects such as sculpture, and a broad range of security dependent documents, sensitive parts and items in a variety of scientific, research and

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defense areas”, and thus it would have been obvious if not inherent that at least one of these items (stamp: which generally includes a uniform or non-uniform color component) may be used as representing a color of the work, and thereby identifying the work based on the color component.

With regard to claim 29, the system according to claim 28, wherein said test section performs the test using a variance of the degree of deviation (See for example, col. 14, lines 1-39).

With regard to claim 30, the system according to claim 28, wherein said test section performs the test using a mean, i.e., average, of the degree of deviation (See for example, col. 14, lines 29-39).

With regard to claim 31, the system according to claim 28, wherein said collation section calculates the degrees of deviation for sub regions dividing the signature in a matrix manner (See Figure 7).

With regard to claim 33, the system according to claim 28, wherein said test section determines whether the target work is identical to the only one work (See for example, col. 3, line 60 through col. 4, line 45).

With regard to claim 34, the system according to claim 28, wherein said work storage stores the digital data of plurality of only one work, and said test section searches said work storage to find one of the only one work which is most similar to the target work (See for example, col. 5, lines 37-55; col. 6, lines 45-50; and col. 7, lines 9-35).

***Allowable Subject Matter***

5. Claims 1-8 and 21-27 are allowed. The following is an examiner's statement of reasons for allowance: the closest prior art of Crane, et al. and Denenberg, et al do not disclose or fairly suggest, among other things, a collation section configured to calculate a degree of deviation between digital data representing a shape, area, and color of a target work to be identified and the digital data stored in the work storage. These features in combination with all of the other elements of the claims are not disclosed or fairly suggested by the closest prior art of Crane, et al. and Denenberg, et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Claim 33 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. **5,309,246** (See for example, col. 1, lines 26-42).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH M. MEHTA can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DANIEL G MARIAM  
Primary Examiner  
Art Unit 2625

October 7, 2005